

Quick Reference for Radiation Exposure and *other Free Radical Stressors*

At the end of this article is a list of available, simple, natural, and effective steps to take now before and during an exposure episode.

While there may or may not be increased radiation risks in your personal life at this time from Japan's unfortunate experience, we are being made aware of the coming reality of 'not so far in the future' Radiation Risks we may well have to face. We must be prepared in order to withstand those in our health and our offspring's. Knowledge is always the first step to preparedness, action generally follows knowledge, but that is your choice. To be informed is to be prepared.

I have been made increasingly aware of the times in which we live, and the need to take God at His word. He has made provision for every emergency that we would possibly encounter, and this radiation challenge is NO EXCEPTION! We have been given a beautiful word picture of the power of God's word ***applied*** in our lives in Ephesians 6:13-17; Wherefore take unto you the whole armor of God, ***that ye may be able to withstand in the evil day, and having done all, to stand.*** Stand therefore, having your loins girt about with truth, and having on the breastplate of righteousness; And your feet shod with the preparation of the gospel of peace; Above all, taking the shield of faith, wherewith ye shall be able to quench all the fiery darts of the wicked. And take the helmet of salvation, and the sword of the Spirit, ***which is the word of God:*** Well, once more scientific experience has again proven the word of God.

In the Chernobyl experience and the follow-up done, it has been demonstrated that the 'Health Message,' given in 1856 to Seventh-day Adventists by inspiration, would have saved all who came under radiation exposure most of their poor health results, and so much of the cancer and thyroid problems that followed. That hasn't changed; it will still have the same effect in today's world. Listen to this excerpt of an article recently written with information from the medical world with those who worked closely with not only the Chernobyl cleanup crew, but also in the hospital setting with the effected citizens of that country.

IODINE, TOCOTRIENOLS, BERRIES, AND LIPOIC ACID TO PROTECT AGAINST RADIATION EXPOSURE

By Byron J. Richards, CCN

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The unfolding events relating to Japan's damaged nuclear reactors is raising the concern in the U.S. of a worst-case scenario of a meltdown with a consequent cloud of radioactive particles following the jet stream over to the U.S. The prevailing jet stream winds would impact Los Angeles to Alaska, and would include Hawaii.

Radioactive pollution would reach the U.S. within 36 hours. It would then travel the typical jet stream across the U.S. that you see on your daily weather programs. While we all hope this problem does not happen, and various experts may debate the severity of public health issues involved if it should, it never hurts to have a better understanding of the subject. What would you do if such a cloud was headed your way?

Japanese health authorities are passing out iodine tablets to those in the vicinity of these reactors - as it is common knowledge that the thyroid gland is a weak spot when it comes to radiation exposure. By flooding the body with iodine it is taken up by the thyroid which then blocks radiation uptake into the thyroid, reducing the risk for future thyroid cancer (which is already an epidemic form of cancer in the U.S. in part likely due to excess CT scans).

Such iodine saturation should occur 24 hours prior to exposure and be maintained during the duration of excess exposure. This solution is not without risks, especially when potassium iodide is used. That is because excess iodine can clog thyroid function, inducing either hypo or hyper thyroid. However, that risk is trivial compared to acute radiation exposure - thus iodine makes sense. I like water-soluble iodine that in my experience is much less problematic when higher doses are used. Liquids can be applied directly over the neck region or taken orally, and reapplied as desired based on concerns.

Protecting the thyroid with iodine seems to be about all public health officials are willing to recommend to the public. However, there are other important steps every person should consider. Radiation interaction within your body generates massive amounts of damaging free radicals, in turn potentially inducing DNA damage that may lead to future cancer - often manifesting a decade or two later. This means it is a good idea to maximize your overall antioxidant defenses. Ideally, this system of defense should be bolstered in advance to provide maximal defense. Unfortunately the antioxidant defense systems of a majority of Americans are in shoddy condition. Many nutrients contain antioxidants and many of these behave in your vital antioxidant network to protect your DNA from damage. In your diet these nutrients come from fruits, vegetables, whey protein, and whole grains. Additionally, almost any nutrient supplement with antioxidant properties, such as vitamin C, will help bolster your antioxidant team. I would suggest to everyone a broad base of antioxidant support as the minimum. Indeed, a [cocktail of antioxidants](#) (selenium, vitamin C, N-acetyl cysteine, alpha-lipoic acid (see foods found in below), alpha-tocopherol succinate, and co-enzyme Q10) started 24 hours after a lethal level of radiation exposure has been shown to be highly protective.

I would like to highlight three specific nutrients that have science showing they can protect your body against radiation damage: tocotrienols, berries, and lipoic acid. Tocotrienols are a unique form of vitamin E that offers protection that regular vitamin E does not. In a recent animal experiment carried out by the U.S. Armed Forces Radiobiology Research Institute it was shown that [gamma tocotrienol](#) can protect against whole body radiation exposure.

Excessive radiation exposure damages DNA, especially DNA relating to the system in our bone marrow that produces all the red and white blood cells that are vital for survival. Therefore radiation exposure has adverse consequences on circulatory health and immune system competence, disturbing energy balance and increasing

the risk for cancer. Of particular importance are the haematopoietic stem cells (HSCs) that constantly rejuvenate blood and can become any of the white or red blood cells, as well as the haematopoietic progenitor cells (HPCs) that transform into specific blood cells. Both HSCs and HPCs are the life force of blood cell rejuvenation and essential to your good health.

In this armed forces experiment mice were exposed to non-lethal amounts of whole body radiation, there was a control group and a group fed gamma tocotrienol. Stem cell colonies (HSCs) were 80% - 86% maintained in the gamma tocotrienol treated mice, while they were 50% reduced in controls. Similarly, progenitor cells (HPCs) had recovered completely within 7 days in the gamma tocotrienol treated mice, while they remained at 30% for weeks in the controls. A detailed analysis of the bone marrow showed that gamma tocotrienol maintained the regenerative integrity of bone marrow cells. The authors concluded that gamma tocotrienol "protected hematopoietic tissue by preserving the HSCs and HPCs and by preventing persistent DNA damage."

Another recent animal study shows that [gamma tocotrienol](#) can offset the adverse effects of radiation exposure, including the reduction of peroxynitrite, the most damaging free radical. This is important because as free radicals begin forming their reactions can cascade into producing large amounts of the most damaging of all free radicals, peroxynitrite. Short-circuiting peroxynitrite formation in response to radiation exposure is of immense importance to protecting DNA.

Lipoic acid (*found in Chlorophyll, broccoli, organic spinach, collard greens and chard, tomatoes, peas and brussels sprouts, Nutritional Yeast*) is a very small and versatile fat- and water-soluble antioxidant. Animal studies show that it helps [maintain the antioxidant defense system](#) in multiple body tissues upon radiation exposure, especially protecting the brain, liver, spleen, kidney, and testis.

The health status of some [6,000 workers from Latvia](#) who went to clean-up the Chernobyl Nuclear Power Plant has been followed for several decades. These workers suffered higher-than-normal rates of problems in their nervous, digestive, respiratory, cardiovascular, endocrine system (especially thyroid) and immunological systems. A study conducted on some of these workers 10 years after the fact showed that [600 mg of lipoic acid](#) for two months was able to normalize many, but not all, of their lab abnormalities. Too bad they didn't have protection prior to and during exposure. [Pretreatment with lipoic acid](#) has been shown to significantly reduce radiation exposure damage to the brain.

Recent animal research conducted by the United States Department of Agriculture showed that [blueberry and strawberry extracts](#) helped prevent brain damage from radiation exposure. Interestingly, the polyphenols of each fruit protected different areas of the brain - supporting a variety of dietary berry intake and/or supplements with multiple berries.

Having an adequate antioxidant defense system for more optimal health is common sense. During times of increased stress your needs for antioxidants rise - and this relates to any type of stress. Radiation exposure is simply one more type of stress - a rather nasty type. The demands in your life or existing health concerns may already be testing your antioxidant bank account. Bolstering your antioxidant defense system to compensate for a potential challenge is also common sense.

In the book written about the two hospitals below Chernobyl, one close to the explosion site and one several hundred miles further south, there is some quite astounding information, showing us how to prevent, if not all, then most of the DNA damage, thyroid and other cancers. Like we mentioned earlier, God foresaw and knew what we would need to do to withstand the evil; done in His strength, by His word, we WOULD STAND! His word is unequivocal. It will accomplish what it has been sent out to do; we can be protected by

His hand as we cooperate with Him. Here is what they found in the first hospital closest to the explosion site. They fed the people plant based diet only, using whole grains, and legumes with vegetables and fruits. They used nutritional yeast for the B Vitamins, supplemented with Calcium, used fiber for bowel cleanses, especially apple pectin fiber. They used some kind of mineral re-supplementation and the results were phenomenal. The people suffered from far less cancer, thyroid problems, brain and nervous system problems, and all of the problems put together, than did their distant neighbors in the hospital further south away from the blast site, who ate the standard fare. All of these supplements need to be obtained from a totally natural source, which would be foods or whole food supplements. Whole food supplements are few and far between. Optimal Health Systems which has now been bested by Divine Nature, are the two companies which we find the leading sources of “whole food” supplements of which we carry both at lifetreewellness.com.

FOR PROTECTION FROM RADIATION

Ideally these steps need to be in place no less than 48 hours in advance of the exposure, but instigate them as soon as you read them for DNA and cell repair as well as protection!

EAT NON-RADIATIVE ELEMENTS:

- o Fresh Fruits and vegetables
- o Whole grains-sprouted when possible
- o Legumes-cooked from scratch or sprouted
- o Raw seeds and a very small amount of raw nuts-soaked in water overnight
- o Purple Dulse (first choice) or Kelp—for the Iodide and protection of the thyroid-this takes the place of Potassium Iodide
- o For **Calcium**: Green leafy leaves in smoothies, or just plain eaten in salads or steamed, brown sesame seeds, carrot and green leafy juice, carob, sunflower seeds will offer you excellent Calcium. If you need more, then use Optimal Health Systems/Divine Nature supplement of a bioavailable natural plant based calcium, chelated the way plants do. If you look for

any other source of supplementation for calcium, you will find trouble with the calcium not being what your body can use, and it will also cause toxic changes in your body, especially the kidneys.

- o **Antioxidants** that are the best we have found are: **Protandem** by mylifevantage.com/swanydittman; this one has large amount of evidence of repairing free radical damage in our cells and DNA, at a rate of one antioxidant to one million free radicals every second for 24 hours with every tablet. Other potent antioxidants are **Mangosteen, Acai, Golgi**, and dark blue grapes i.e. **concord**s. **Aloe Vera** plant leaves, blended up in smoothies have been shown to alleviate and prevent DNA damage done by free radicals.
- o **Tocotrienols**, the part of vitamin E that is needed must be liquid form and from plants that have not been GMO changed. These can be obtained from lifetreewellness.com, too. **Opti-force or Cell Repair** by Divine Nature offers excellent, instant, so to speak, help for the radiation exposed/damaged cells and DNA. This is ordered at lifetreewellness.com.
- o **Re-Mineralization** of our bodies needs to begin today. The one most effective therapy for that is **Pink Himalayan Salt Sole**'. This salt (see my article on this salt at lifetreewellness.com) has a crystallization formation that no other salt has, which renders it completely absorbable by the body without any energy requirement: it is totally non-toxic as is sea salts and regular table salts; it will supply 83 or 4 of the needed 90 plus mineral needs of the body. It will not contribute to heart disease or hypertension, and those types of degenerative diseases know to be aggravated by salt as we have known salt, due to its crystallization formation and source.
- o **SuperOneFood** found at lifetreewellness.com will supply a rich amount of the **B Vitamins** needed for stabilization of the brain and nervous system during radiation stress, as well as containing antioxidants and Dulse
- o **Lecithin granules** (must say non-GMO) 1 tsp daily supplies many various fatty acid, precursors for brain chemistry, and protein
- o **Clay** is a known substance to draw out any toxic free radical presence. So combine that with charcoal, apple pectin fiber coupled with psyllium seed and husk fiber, and you have the strongest internal poultice for drawing that I have found in 20 years. Intestinal Detox Formula #2 can be purchased from the above website as can be just plain Idaho White Clay for foot baths, tub soaks, etc.
- o **Pantothenic acid 200 mg, inositol 100mg, Potassium 5,500mg and Magnesium 750 mg, Zinc 50 mg, Coq10**

100mg are all suggested supplements by the Encyclopedia of Natural Healing by Vance Ferrell, that will enable the body to defend itself against radiation. Other sources recommend these nutrients as well.

- o Remember to cover your gardens
- o Cover your nose and mouth when going outside if fall out is current
- o Close up your homes so that fallout does not come in on the draft